BY ORDER OF THE COMMANDER
919TH SPECIAL OPERATIONS WING

919 SOW INSTRUCTION 21-106
30 MAY 2001

Maintenance

AIRCRAFT INSTALLED ENGINE RUN

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction outlines procedures for performing aircraft engine runs. This instruction implements AFPD 21-1, *Managing Aerospace Equipment Maintenance.* It applies to Logistics Group aircraft maintenance personnel and aircrew members in the flying squadrons of the Operations Group.

SUMMARY OF REVISIONS

Clarified para 5.10. to ensure crew door is closed while engine is in operation. A * indicates revisions from the previous edition.

1. Certification Process For Engine Run Certifying Officials:

*1.1. Training and certification officials will be accomplished in accordance with AFSOCI 21-106, *Maintenance Management of Aircraft,* para 5.5.6.

*1.2. Annual requalification of certifying officials will be accomplished by simulator or CPT. If simulator or CPT is not available, certifying officials may be re-qualified by designated Standardization/Evaluation aircrew members. Certifying official simulator training will not exceed two years. The certification will be annotated on AF Form 2426, **Training Request and Completion Notification,** and entered into Core Automated Maintenance System (CAMS).

2. Certification Process For Maintenance Personnel:

2.1. The Engine Run certifying officials will coordinate the training and certification of maintenance personnel qualified to perform aircraft engine ground operations.

2.1.1. Training and certification will be accomplished in accordance with AFSOCI 21-106.

*2.1.2. The results of the initial and subsequent certifications will be annotated on AF Form 2426 and entered into the CAMS.

*2.1.3. Simulator training will be accomplished every two years.

3. Quality Assurance Evaluation:

3.1. Quality Assurance will perform a quarterly engine run evaluation.

4. Notification Procedures:

*4.1. The Production Superintendent/Flight Line Expediter will request engine runs through the MCF. They will provide the following information: Aircraft Tail Number, location and Number of souls on board. MCF will notify station 4 (Duke Fld) /Eglin Fire Dispatch, Eglin Security police, and Tower (if open) of the proposed engine run and pertinent information. If MCF is not manned or closed then the production superintendent will notify the said agencies.

5. Operation Of Aircraft Engines Above Ground Idle On Ramp:

5.1. Approval to operate engines above ground idle on the ramp can only be granted by a flight line section chief, flight chief, production superintendent, or maintenance superintendent. A risk assessment must be accomplished prior to granting this approval.

5.2. Run up engines to maximum power or maximum reverses will not be applied to more than two symmetrical engines at the same time i.e. 1 and 4 or 2 and 3.

5.3. Only use power settings above ground idle when there are no aircraft located in the two parking spots directly behind and one parking spot directly in front at the aircraft to be run.

*5.4. Maximum power application will not exceed a time limit of five minutes. Engine runs at maximum power that requires more than five minutes will be performed on spots A-12 and B-7. Spot B-12 may be used only during the daytime.

5.5. Maximum reverse power may be applied only in short burst provided that parking spots directly behind, and in front of the aircraft are vacant.

5.6. MCF will be notified that a power run is going to take place along with the aircraft location. MCF will then notify all radio nets accordingly.

5.7. Flight line expediter will ensure that personnel working on other aircraft on the flight line (especially on top of aircraft) are made aware that an engine power run is about to take place. Also, if an aircraft is supported by jacks on the flight line, he will determine whether the run will have any adverse affects.

5.8. If controlled entry is in the engine wake danger zone, or directly in front of parking spot where power engine run will take place expediter vehicle, or red cones will be used to block entry.

5.9. The ground observer will continuously be on alert for any person, or vehicle entering the danger zones or any difficulty caused by the prop wake and notify run supervisor immediately if this should occur.

5.10. The crew entrance door will be closed during engine operation above ground idle.

6. Engine Start Procedures:

6.1. At no time will engines be started simultaneously. Engines will be started one at a time.

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